pure and applied geophysics (PAGEOPH)

UNIVERSITY OF HAWAII LIBRARY

Honorary Editors

M. Bossolasco, Torino (Founder)
F. Gassmann, Zürich

Editors	Europe, Asia (exc. Japan), Africa	America, Japan, Australia
GENERAL GEOPHYSICS	**St. Müller** Institut für Geophysik ETH Hönggerberg CH–8049 Zürich Switzerland	**M. Wyss** Cooperative Institute for Research in Environmental Sciences University of Colorado Boulder, Colorado 80302, USA
ATMOSPHERIC PHYSICS	**H.U. Dütsch** Atmosphärenphysik ETH Hönggerberg CH–8049 Zürich Switzerland	**H.R. Pruppacher** Department of Meteorology University of California 405 Hilgard Avenue Los Angeles, Calif. 90024, USA

Index to volume 113, 1975

Per.
QC801
G37

Birkhäuser Verlag
CH–4010 Basel (Switzerland)
© 1975

Subject Index

A

Aerosol, 515
Aftershocks, focal trend, 483
Aquifer, specific yield, 583
Aseismic faulting, 127
Assam, earthquake mechanisms, 467
Atmospheric composition, 403
Atmospheric convection
  effect on large-scale circulation, 909
  energetics of, 909
Atmospheric electricity, 515, 525
Atmospheric energy content, effect of life cycle of cumulus cloud on, 925
Atmospheric tides, 355

B

Belgium, coastal sedimentation pattern, 577
Borehole observations, 311
Boundary layer, 331
Burma, earthquake mechanisms, 467
b-values, 31

C

Carbon dioxide, 331
Circulation, residual, 577
Clay gouge, 87
Cloud glaciation
  effect on vertical velocity of, 825
  generation of buoyant energy by, 825
Cloud rolls, 1055
Computer contour plotting of geophysical survey data, 419
Condensed water mass
  effect of particle fall speed on, 971
  effect of updraft on, 971
Contour plotting by computer, 419
Convective clouds
  airflow around, 851
  airflow in, 851
  circulation in, 891
  conversion of cloud water to rain in, 983
  evolution of, 891
  formation of graupel in, 949
  formation of rain in, 949
  precipitation loading of, 983
  rain production in, 891
  vertical motion in, 983
Convective storms
  dynamics of, 713
  hailstreaks from, 735
  internal airflow of, 765
  mesoscale environment of, 713
  migration direction of, 747
  migration velocity of, 747
  multicellular nature of, 747
  numerical modelling of, 713
  observation techniques of, 713
  precipitation-characteristics of, 765
  radar echo regions of, 735
  radar reflectivity of, 765
  structure of, 713
  three-dimensional structure of, 735
  triggering of, 713
  updraft structure of, 735
Critical level, 561
Crustal resistivity, 219, 229
Crustal structure, 257
Crustal structure (average) in Sweden, 673
Cumuli
  distribution of liquid water in, 1067
  dynamic development of, 1067
  effect of entrainment on the formation of, 1067
Cumulonimbus
  hail embryo formation in, 1005
  ice phase growth in, 1005
  seeding requirements for, 1005
Cumulus clouds
  effect on large-scale circulation, 837
  effect on tropical disturbances, 837
  incorporation in large-scale models, 837
  interaction with large-scale environment, 869
  parameterization of, 837
  redistribution of heat and moisture by, 869
Cumulus convection, 1055
Cumulus development
  numerical prediction of, 803
  radar observation of, 803

D

Diffusion, 501
Dikes, magnetic anomalies, 625
Dilatancy, 119, 141, 183, 197, 207
Dynamics, 535, 549, 569

E

Earth models of electromagnetic induction, 591
Earthquake
  focal mechanisms, 467, 483
  migration, 461
  occurrence in space and time, 447
  prediction, 1, 25, 45, 51, 97, 107, 119, 141, 149, 169, 183, 197, 207, 219, 229, 237, 251, 257, 281, 293, 297
  source, 69, 127, 149, 169
  source models, 651
  statistics, 447, 461
Eddy diffusion coefficient, 389
Electromagnetic core-mantle coupling, 611
Electromagnetic induction in non-uniform earth models, 591
Equatorial enhancement of geomagnetic variations, 601
Evaporite, 417

F

Failure, 45
Fault-gouge, 69
Fault plane solutions of earthquakes, 467, 483
Fluid flow, 119

Fourier transforms of magnetic anomalies, 625
Frictional sliding, 31

G

Generalized ray theory, 651
Geomagnetic field variations, 601
Geomagnetic westward drift, 611
Gravity, 97
Gravity waves, 561

H

Hail
  dry growth of, 1019
  wet growth of, 1019
Higher modes of seismic surface waves, 661
Himalayas, earthquake mechanisms, 467
Hydro-fracture, 321
Hydromagnetic waves and westward drift, 611

I J

Induction, electromagnetic, 591
In-situ stress, 321
Instruments, 375
Ions, 525
Irreversible magnetization, dependence on compression, 635
Jet stream, 549

K

Koyna, aftershock focal mechanisms, 483

L

Laboratory experiment, 535, 569
Labrador trough (geosyncline), 435
Low-velocity channel in upper mantle, 661

M

Macroseismic intensity data in Virginia, 695
Magnetic anomalies of dikes, 625
Magnetic properties of igneous rocks, 635
Magnetization, dependence on compression, 635
Microseismic ground motions in Virginia, 695
Mid-latitude convection, 851
Migration of earthquakes, 461
Migration of seismic activity, 683
Moisture gauge, 583
Momentum, 535, 549
Mud deposition, 577
Multimode surface-wave response, 661

N

Numerical method, 549

O

Overburden (of non-uniform thickness) in models of electromagnetic induction, 591

P

Palaeoatmosphere, 403
Palaeomagnetism of Labrador geosyncline, 435
Periodicities of Sq(H), 601
Plotting of geophysical survey data, 419
Precipitation zones
  effect of atmospheric stability on, 1035
  effect of drop evaporation on, 1035
  effect of entrained air on, 1035
  effect of thermodynamics on, 1035
Precursors, 149, 169, 297
Probability of earthquake occurrence, 683

R

Radiation, 331, 375
Radiation pattern of earthquake source, 651
Related earthquake events, 447
Residence time, 489
Resistivity of rocks, 207
Return periods of earthquakes, 683
Rock magnetism, 51
Rock magnetism of diabase dikes, 435
Rock properties, 1, 25, 31, 183
Rotation of the earth and geomagnetic westward drift, 611

S

Sea level, 107
Sedimentation pattern, 577
Seismic activity of individual regions in Europe, 683
Seismic instrumentation, 311
Seismic noise, 311
Seismic wave velocities in the Swedish crust, 673
Shallow cumuli
  creation of, 1055
  penetration into inversion layer of, 1055
Shear flow, 561
Sitka earthquake, 297
Sliding characteristics, 69
Source dimensions, 141
Sq(H) variations, 601
Squall lines, 1055
Stable sliding, 63
Statistics of earthquake occurrence, 447
Stick slip, 63
Strain, 251
Stratosphere, 389
Stress dependence of magnetization, 635
Stress measurements, 321
Stress redistribution in fault systems, 461
Stress, tidal, 577
Strike-slip earthquake sources, 661
Sulfur dioxide, 489
Surface layer, 525
Susceptibility, dependence on compression, 635
Synthetic seismograms, 651

T

Tectonic creep, 63
Tectonic faulting, 87
Temperature, 331
Three-dimensional, 561
Tibet, earthquake mechanisms, 467
Tilt, 237
Trace gases, 389
Travel times of seismic waves in Sweden, 673
Tropical convection, 851
Tropopause, 365
Two-dimensional momentum transfer, 535

U
Uplift, 97, 107, 119

V
Velocity changes, 1, 25, 257, 281, 293
Vertical velocity
  correlation to potential wet-bulb temperature, 787
  in thunderstorms, 787
  measurement of, 787
  near squall lines, 787
Virginia, seismic ground motions, 695

W
Wave, 501, 561
Westward drift of geomagnetic field, 611

Index of Authors

A

Aboodi, E., v. Vered, M. 651
Acheson, D. 611
Ayers, R.L., and Bollinger, G.A. 695

B

Bardhan, M. 583
Beard, K.V., v. Hall, W.D. 515
Ben-Menahem, A., v. Vered, M. 651
Berkshire, F.H. 561
Blatter, L., v. Wu, F.T. 87
Bollinger, G.A., v. Ayers, R.L. 695
Bonner, B.P. 25
Bonsang, B., v. Cuong, N.B. 489
Booker, J.R. 119
Boore, D.M., McEvilly, T.V., and Lindh, A. 293
Brace, W.F. 207
Brace, W.F., v. Mjachkin, V.I. 169
Brady, B.T. 149
Braham, R.R., jr., v. Nelson, S.P. 735
Byerlee, J.D., and Summers, R. 63

C

Calcagnile, G., v. Panza, G.F. 661
Chappell, Ch.F., and Smith, D.R. 825
Cherry, J.T., Schock, R.N., and Sweet, J. 183
Cho, H.-R. 837
Chouhan, R.K.S., and Srivastava, V.K. 467
Cowley, A.D., v. Haurwitz, B. 355
Cramer, C.H., and Kovach, R.L. 281
Cuong, N.B., Bonsang, B., Lambert, G., and Pasquier, J.L. 489

D

Danielsen, E.F. 1019
Das, S.K., v. Sengupta, S. 625
Davies, P.A., and Walin, G. 569
Davies-Jones, R.P., and Henderson, J.H. 787
Dieterich, J.H., v. Mjachkin, V.I. 169
Duda, S.J., v. Powell, J.A. 447, 461
Dunst, M. 535
Dunst, M., and Roeckner, E. 549

E

Ehhalt, D.H., Heidt, L.E., Lueb, R.H., and Pollock W. 389
Engelder, J.T., Logan, J.M., and Handin, J. 69

F

Fankhauser, J.C., v. Newton, Ch.W. 747
Freyer, H.D., and Wagener, K. 403
Fritsch, J.M. 851
Fye, F.K., v. Zdunkowski, W.G. 331

G

Girard, C., and List, R. 1035

H

Hadley, D., v. Kanamori, H. 257
Hadley, K. 1
Hall, W.D., and Beard, K.V. 515
Hamada, K., v. Takahashi, H. 311
Handin, J., v. Engelder, J.T. 69
Haurwitz, B., and Cowley, A.D. 355
Heidt, L.E., v. Ehhalt, D.H. 389
Henderson, J.H., v. Davies-Jones, R.P. 787
Henz, J.F., v. Matthews, D.A. 803
Hughes, W.J., and Wait, J.R. 591

I

Israelsson, S., v. Knudsen, E. 525

J

Jeleńska, M. 635
Johnston, J.S., v. Mortensen, C.E. 237
Jung, R., v. Rummel, F. 321

K

Kalkani, E.C. 419
Kanamori, H., and Hadley, D. 257
Kao, S.K., Paegle, J., and Youngblood, R.D. 501
Kasahara, K. 127
Kessler, E. 971
Khalili, A. 365
Knudsen, E., and Israelsson, S. 525

Koenig, L.R., and Murray, F.W. 925
Koenig, L.R., v. Murray, F.W. 909
Kopp, F.J., v. Orville, H.D. 983
Kovach, R.L., v. Cramer, C.H. 281
Kuo, H.L. 1055

L

Lambert, G., v. Cuong, N.B. 489
Lilly, D.K. 713
Lindh, A., v. Boore, D.M. 293
List, R., v. Girard, C. 1035
Logan, J.M., v. Engelder, J.T. 69
Lueb, R.H., v. Ehhalt, D.H. 389

M

Manamohanan, S.B., v. Sastri, V.D.P. 375
Martin, R.J., and Wyss, M. 51
Matthews, D.A., and Henz, J.F. 803
McEvilly, T.V., v. Boore, D.M. 293
Miller, L.J. 765
Mjachkin, V.I., Brace, W.F., Sobolev, G.A., and Dieterich, J.H. 169
Mortensen, C.E., and Johnston, J.S. 237
Murray, F.W., and Koenig, L.R. 909
Murray, F.W., v. Koenig, L.R. 925
Myers, C.G., v. Orville, H.D. 983

N

Nelson, S.P., and Braham, R.R., jr. 735
Newton, Ch.W., and Fankhauser, J.C. 747
Nihoul, J.C.J. 577
Nur, A. 197

O

Ogura, Y. 869
Orville, H.D., Kopp, F.J., and Myers, C.G. 983

P

Paegle, J., v. Kao, S.K. 501
Paegle, J., v. Zdunkowski, W.G. 331
Panza, G.F., and Calcagnile, G. 661
Pasquier, J.L., v. Cuong, N.B. 489
Pollock, W., v. Ehhalt, D.H. 389
Powell, J.A., and Duda, S. J. 447, 461
Priestley, K.F. 251

R

Rao, B.S.R., Rao, T.K.S.P., and Rao, V.S. 483
Rao, T.K.S.P., v. Rao, B.S.R. 483
Rao, V.S., v. Rao, B.S.R. 483
Rikitake, T. 141
Roberson, H., v. Wu, F.T. 87
Roeckner, E., v. Dunst, M. 549
Rummel, F., and Jung, R. 321

S

Sastri, V.D.P., and Manamohanan, S.B. 375
Schenk, V., v. Schenková, Z. 683
Schenková, Z., and Schenk, V. 683
Schock, R.N., v. Cherry, J.T. 183
Seguin, M.K. 435
Sengupta, S., and Das, S.K. 625
Smith, D.R., v. Chappell, Ch.F. 825
Sobolev, G.A. 45, 229
Sobolev, G.A., v. Mjachkin, V.I 169
Srivastava, V.K., v. Chouhan, R.K.S. 467
Stesky, R.M. 31
Summers, R., v. Byerlee, J.D. 63
Sweet, J., v. Cherry, J.T. 183

T

Takahashi, H., and Hamada, K. 311
Takahashi, T. 949
Takeda, T. 891
Telford, J.W. 1067

V

Vered, M., Ben-Menahem, A., and Aboodi, E. 651

W

Wagener, K., v. Freyer, H.D. 403
Wahlström, R. 673
Wait, J.R., v. Hughes, W.J. 591
Walin, G., v. Davies, P.A. 569
Walsh, J.B. 97
Wu, F.T., Blatter, L., and Roberson, H. 87
Wyss, M. 107, 297
Wyss, M., v. Martin, R. J. 51

Y

Yacob, A. 601
Yamazaki, Y. 219
Young, K.C. 1005
Youngblood, R.D., v. Kao, S.K. 501

Z

Zdunkowski, W.G., Paegle, J., and Fye, F.K. 331

Digitized by the Internet Archive
in 2023 with funding from
Kahle/Austin Foundation

https://archive.org/details/pure-and-applied-geophysics_1975_113_index